

## **Apparatus and methods for increasing the tonal complexity and quality of live and recorded musical instruments**

**Abstract:** A musically resonant apparatus with continuously variable resonances and methods for increasing the tonal complexity and quality of live and recorded musical instruments utilizes the position of one or more movable resonators to determine the freely resonant dimensions of the resonators comprising the apparatus. The dimensions and materials of this apparatus are scaled and selected to resonate in one or more musically relevant frequency ranges for the instrument and musical situation it is to be used with. The apparatus is mechanically coupled to a microphonic or vibrationally sensitive component in the chain of equipment between a musician and the listener. The continuous adjustability of one or more resonators allows the user to easily select the best complimentary resonances. This improves an instrument's tonal complexity, and thus its tonal quality at the listener's ears quickly, easily, and economically without invasive techniques.